



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/551,485

06/21/2006

Pie Yen Chia

NIHE-38824

4154

52054 7590 10/07/2010

PEARNE & GORDON LLP  
1801 EAST 9TH STREET  
SUITE 1200  
CLEVELAND, OH 44114-3108

EXAMINER

KHAN, MEHMOOD B

ART UNIT

PAPER NUMBER

2617

NOTIFICATION DATE

DELIVERY MODE

10/07/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patdocket@pearne.com  
dchervenak@pearne.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/551,485	<b>Applicant(s)</b> CHIA ET AL.	
	<b>Examiner</b> MEHMOOD B. KHAN	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 40-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 40-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/19/2010</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/01/2010 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 40-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Minde et al. (WO 00/33511 herein Minde) in view of Kalliokulju et al. (US 6,618,591 herein Kalliokulju).**

Claim 40, Minde discloses a terminal (**Pg 5: 21-24, Fig. 1: 101, 102, telephone, etc.**) that is capable of performing QoS control (**Pg 6: 5-8, measure link parameters, measure device parameters, thus performing QOS control**), comprising:

a monitor module configured to collect QoS information of the terminal (**Pg 6: 5-8, make measurements on end-user quality of service (QOS), since measuring and reporting thus collection of QOS and monitor module is thus inherent**) and

monitors whether QoS statistics exceed predetermined threshold values (**Pg 11: 16-19, reported, thus monitors, end-user quality of service exceeds a threshold value**);

a communication module configured to report the QoS information collected by the monitor module (**Pg 6: 5-8, send reports on measured data, since sending reports thus communication module**) to a central controller (**Pg 6: 5-8, service quality supervisor (SQS)**) and receive QoS enforcement instructions (**Pg 4: 9-12, sending commands**) from the central controller (**Pg 4: 9-12, sending commands by a service quality supervisor (SQS)**); and

an enforcement module configured to regulate (**Pg 10: 10-13, adjust**) a behaviour of the terminal (**Pg 10: 10-13, device transmission parameters**) according to the QoS enforcement instructions (**Pg 10: 10-13, commanding**) received by the communication module (**Pg 10: 10-13, Dynamic adaptation sent to the endpoints, thus received by communications module, commands the endpoints to adjust device transmissions**); Minde discloses wherein, when the monitor module detects threshold violation where the QoS statistics exceed the predetermined threshold values (**Pg 11: 16-19, reported, thus monitors, end-user quality of service exceeds a threshold value**).

Minde does not explicitly disclose the enforcement module performs traffic regulation to correct the threshold violation.

In an analogous art, the enforcement module performs traffic regulation to correct the threshold violation (**Col 2: 30-40, when an error rate threshold (QOS statistic) is exceeded, a command from the RAN reduces the bit rate of the connection**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Minde to measure error rate and reduce the bit rate of a

Art Unit: 2617

connection as taught by Kalliokulju so as that the error rate no longer exceeds the error rate threshold **(Col 2: 38-40)**.

Claim 41, Minde discloses wherein the monitor module collects the QoS information on Individual service sessions **(Pg 7: 10-24, applications, thus individual service sessions)**.

Claim 42, Minde discloses wherein the enforcement module compares a value indicated by the QoS enforcement instructions **(Pg 16: 5-10, command received from SQS)** to a current measurement measured by the monitoring module **(Pg 16: 5-10, limits imposed by last command from SQS)**, and adjusts QoS parameters to regulate the behaviour of the terminal if necessary **(Pg: 16: 10-15, service is adapted)**.

Claim 43, Minde does not explicitly disclose wherein the enforcement module comprises at least any one of the following means: means for classifying packets into different priorities within the terminal; means for managing dropping of packets within the terminal when resource quota allocated to the terminal is used up; means for reducing congestion at the terminal by lowering a transmission rate; means for reducing congestion at the terminal by delaying transmission of packets when insufficient resource is allocated to the terminal; means for terminating sessions and stopping transmission of packets; means for reducing outgoing traffic by limiting total number of outgoing sessions; means for reducing incoming traffic by limiting total number of incoming sessions; and means for reducing incoming traffic by requesting for less incoming traffic.

In an analogous art Kalliokulju, wherein the enforcement module comprises at least any one of the following means: means for terminating sessions and stopping transmission of packets **(Col 2: 30-40, until the connection is terminated)**. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Minde to measure error rate and reduce the bit rate of a connection as taught by Kalliokulju so as that the error rate no longer exceeds the error rate threshold **(Col 2: 38-40)**.

Claim 44, as analyzed with respect to the limitations as discussed in claim 40.

Minde discloses a central database **(obvious since predetermined end-user QOS implies subscription and service level agreement)** configured to store subscription information of a user who uses the terminal and service level agreement information **(Pg 11: 6-13, end-user threshold)**; and

central controller give QoS enforcement instructions to the terminal according to the QoS information, the subscription information and the service level agreement information stored in the central database **(Fig. 5: 525, adapt service command based on EuQOS)**.

Claim 45, as analyzed with respect to the limitations as discussed in claim 40 and 44.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MEHMOOD B. KHAN whose telephone number is

Art Unit: 2617

(571)272-9277. The examiner can normally be reached on Monday - Friday 8:30 am - 5:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. B. K./  
Examiner, Art Unit 2617

/Lester Kincaid/  
Supervisory Patent Examiner, Art Unit 2617